Diabetes and Female Sexuality

Enzlin and colleagues have written an excellent review of the literature on diabetes and female sexual function.[1] They comment on the small number of papers on this subject and the fact that there is some discrepancy in the findings of those who have addressed it. We must look at why this is the case. The most important reason it that in clinical practice men frequently complain spontaneously about impotence and if specifically asked over 30 % will say that they have a problem.[2] On the other hand, women may complain of pruritis vulvae and or a vaginal discharge (usually the result of candida infection), or even of hypoglycaemia during intercourse, but they rarely complain of a problem with sexual function.[3]

In women, the physiological equivalent to erection is vaginal lubrication. In men an erection is essential for sexual intercourse as if it is not stiff enough, vaginal entry is difficult or impossible. In contrast vaginal lubrication is not an 'or all nothing' phenomenon and is much less crucial to sexual performance. Many women who, on expert questioning, are found to have reduced vaginal lubrication, often either don't know they have a problem or use a lubricating cream which is an easy simple solution. This partly explains why, although several studies confirm some impairment of vaginal lubrication, this is rarely seen as a serious issue. Vaginal lubrication is difficult to measure in any woman and even more difficult in women with diabetes, where infections may introduce complications. This probably explains the variation between results in different studies. The most scientific approach is to use vaginal plethysmography but, so far, results on only seven women with diabetes have been reported.[4] Large cohort studies would be of some scientific interest. Fifteen years ago our group attempted to do such a study but found that many women, particularly those who had passed adolescence, were very reluctant to take part and we felt that it would have been wrong to try to persuade them when they didn't feel that they had a problem. Now, many years later, in a more sexually enlightened community, such a study might be possible.

Erection in the male and vaginal lubrication in women is a vascular response under control of the autonomic nervous system. Those with diabetes may be affected by either vascular disease, autonomic neuropathy or both. Men with severe autonomic neuropathy are invariably impotent. In our study of 84 diabetic women, autonomic function was evaluated clinically and measured using the usual cardiovascular reflex tests.[5] Surprisingly, although the 14 women with symptomatic autonomic neuropathy reported slightly less non-genital sexual arousal during sexual activity, they did not report any differences in vaginal lubrication, in the frequency of sexual intercourse, spontaneous sexual interest, orgasm, dyspareunia or other aspects of sexual function compared to the rest of the group studied. There were two women with severe autonomic neuropathy who were also blind and who both died within a few months of completion of the study. One of these women complained of occasional diarrhoea during sexual intercourse but no other problems, while the other said that she had a 'perfect sex life'.[6] Other studies quoted by Enzlin show no relationship with duration of diabetes or neuropathy. The hypothesis put forward by Enzlin is not a new one; it has been investigated and discussed but for the many reasons mentioned in this paper it has not yet been proven.

In addition to vaginal lubrication (sexual arousal) which is equivalent to erection the review discusses sexual desire, problems with orgasm (which is equivalent to ejaculation) and dyspareunia. As the authors explain there is a problem with precise definition of all these in women and they may be affected by poor general health, infection, depression, and poor body image, all of which are more common in some groups of diabetic women. It is therefore not surprising that different studies give slightly different results, with no consistent identification of clinically important problems. Men with diabetes have no change in sexual desire and only very rarely problems with ejaculation so we might not expect a problem in comparing men with women.

The differences in male and female reactions to sexual difficulties are striking in non-diabetic subjects. Most men attending sexual problem clinics complain of problems with genital or ejaculatory response; they rarely complain of inadequate enjoyment or interest. In women, the converse applies. Most women complain of inadequate enjoyment or interest, very few complain of inadequate lubrication. Men focus on physiological function, while women focus on the subjective quality of their sexual relationship. It is important to remember that, as Enzlin quotes from our paper, a sexual encounter in human terms is much more than the physiology of spinal reflex activity. The central nervous system exerts its control, facilitating and inhibiting responses while adding its own special ingredients, fantasy, expectations, memories and emotional situations. Nocturnal sex dreams in men develop spontaneously in the teens but women need a degree of conditioning, based on exposure and experience. Tenderness and security provided by the feeling of being loved are necessary requirements for the woman's response. It seems likely that in most diabetic women, psychological factors override any minor physiological abnormalities.

Further studies, particularly in Type 2 diabetes mellitus would be of interest, although more from an academic than from a practical point of view. Whatever further studies may show it is clear that from a clinical point of view there is not one single major problem equivalent

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to that seen in men. I agree that it is important to ask about several aspects of sex. Sexual problems can certainly arise in women with diabetes, and many welcome the opportunity for discussion. If they do have a problem, inquiry should be made about drug history and the possibility of depression. A clinical examination should be carried out and any problems treated in the usual way as appropriate for each individual patient. I welcome articles highlighting sexual aspects of life in women with diabetes for rather different reasons than those described in the present review. Some women are reluctant to initiate a discussion about a vaginal irritation or discharge so it is important to give women the chance to discuss vaginal infections. These are very common in women with diabetes and can usually be treated effectively. Young women may worry if they have a late menarche or irregular menstrual cycles, which are also particularly common in those with diabetes, and it is usually possible to reassure such patients. It is extremely important that women of child bearing age should be asked about contraception and advised about the importance of planned pregnancies and of attending for pre-pregnancy care. It is clear that this can improve the outcome of pregnancy in women with diabetes and in particular can reduce the incidence of major congenital malformations in the baby.[7] All women should know about this and have the opportunity to ask questions and express any anxieties they may have about any aspect of sexual function of reproduction.

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